

CLAIMS

1. A method of intelligent information processing in the Internet comprising:

- 5 a) identifying whether an input is one of a URL address, English words, native language characters, and native language pronunciation notations;
- b) if the input is a regular URL, querying the input in a corresponding server through the Internet, and directly obtaining the query result therefrom;
- 10 c) if the input includes the native language pronunciation notations, parsing the input against at least one phonetic spelling word list to find out corresponding Internet keyword, and then fetching a corresponding query result; and
- 15 d) if the input includes characters of a native language, processing the input as a natural language input in a natural language table, and obtaining a desired Internet keyword, and fetching a corresponding query result of website URL.

2. The method of claim 1, further comprising determination of whether the pronunciation notations are either full phonetic spelling words or abbreviations of first letters of phonetic spelling words, and if the input is a string of full phonetic spelling words, the input string is parsed in a full Chinese phonetic spelling word list with all possible combinations of meaningful words.

3. The method of claim 1, wherein after the entry of the query string in full phonetic spelling, the system parses the query string against a Full Chinese Pinyin Words List (FCPWL) and splits the query string into one or more Chinese phonetic spelling words, that is $W=\{W_1, W_2, \dots, W_N\}$; and for each word W_x in W , the system will parse query input in the FCPWL to find the attached Internet Keyword Entry Point List $IKEPL_x$, such that each node in $IKEPL_x$ will point to an Internet Keyword whose phonetic spelling containing W_x ; and then the system combines $IKEPL_1, IKEPL_2, \dots, IKEPL_N$ to obtain a

result $R = \text{IKEPL}_1 \cup \text{IKEPL}_2 \cup \dots \text{IKEPL}_N$; each Internet keyword in R having a phonetic spelling word containing at least one word W_x in W.

4. The method of claim 3, wherein after combination of the attached Internet keywords, the system further calculates the weight of each Internet keywords in R according to the specified rules, including weighing the count of the number of words within W that the Internet keyword contains, and weighing the total length of words within W that the Internet keyword contains; and then sorting the result list R according to weight of Internet keywords, so that the most approximate result appears at the head of the list, followed by limited number of results in R to obtain a final result Internet keywords list R.

5. The method of claim 1, further comprising determination of whether the pronunciation notations are either full phonetic spelling words or abbreviations of first letters of phonetic spelling words, and if the input is a string of abbreviations of first letters of phonetic spelling words, the input string is parsed in an abbreviation Chinese phonetic spelling word list with all possible combinations of meaningful words.

6. The method of claim 5, wherein after the determination of the query input being in an abbreviated Chinese phonetic spelling words, the system parses the query input against ACPWL, and splits the query input into one or more abbreviated Chinese phonetic spelling words, that is, $W = \{W_1, W_2, \dots, W_N\}$; and for each word W_x in W, the system parses the word in an abbreviated Chinese phonetic spelling word list (ACPWL) to find the attached Internet Keyword Entry Point List IKEPL_x , such that each node in IKEPL_x will point to a Internet Keyword whose abbreviated phonetic spelling words containing the word W_x ; and then the system combines $\text{IKEPL}_1, \text{IKEPL}_2, \dots, \text{IKEPL}_N$ to get a result $R = \text{IKEPL}_1 \cup \text{IKEPL}_2 \dots \text{IKEPL}_N$; and then each Internet keyword in R has an abbreviated phonetic spelling word containing at least one word W_x in W.

7. The method of claim 6, wherein after combination of the attached Internet keywords, the system further calculates the weight of each Internet keyword in R according to the specified rules, including weighing the count of the number of words within W that the Internet keyword contains, and weighing the total length of words within W that the Internet keyword contains; and then sorting the result list R according to weight of Internet keywords, so that the most approximate result appears at the head of the list, followed by limited number of results in R to obtain a final result Internet keywords list R.

8. The method of claim 1, wherein said natural language table is a Chinese English Word List such that the input is parsed therein with all possible combinations of meaningful words to find out attached Internet keyword.

9. The method of claim 8, wherein after parsing the query input against the Chinese English Words List (CEWL), splitting the query input into one or more Chinese words $W=\{W_1, W_2, \dots, W_N\}$; for each word W_x in W, parsing the word W_x in the CEWL to find the attached Internet Keyword Entry Point List $IKEPL_x$, and then having each node in the $IKEPL_x$ point toward an Internet Keyword containing the word W_x .

10. The method of claim 9, wherein the system combines all $IKEPL_1, IKEPL_2 \dots IKEPL_N$ and gets a result R, that is, $R = IKEPL_1 \cup IKEPL_2 \cup \dots IKEPL_N$; and thus having each $IKEPL_x$ point to an Internet keyword containing at least one word W_x ; combining the obtained results, and calculating the weight of each Internet keyword in R according to specified rules, including:

- (1) Weighing the count of the number of words within W that the Internet keyword contains;
- (2) Weighing the total length of words within W that the Internet keyword contains.

11. The method of claim 10, wherein the system will calculate the comprehensive weight of each Internet keyword based on the above rules,

and after the calculation, the system will sort the result list R according to weight of the Internet keywords such that the most approximate result appears at the head of the result list, and the system will limit the number of results in R to obtain the final Internet keyword list.

12.A method of intelligent information processing for homonym words of phonetic spelling comprising the steps of, after the entry of a query string of phonetic spelling words, analyzing all possible homonym words and identifying all of these words as searchable words of full Chinese phonetic spelling; for each of the homonym words of Chinese phonetic spelling, carrying out the calculation of full Chinese phonetic spelling words search in a full Chinese phonetic spelling words list; combining all search results therefrom, analyzing the results and obtaining the final and most possible results.

13.The method of claim 12, wherein said calculation of full Chinese phonetic spelling is carried out by parsing the query string against a Full Chinese Pinyin Words List (FCPWL) and splitting the query string into one or more Chinese phonetic spelling words, that is $W=\{W_1, W_2, \dots W_N\}$; and for each word W_x in W, the system will parse query input in the FCPWL to find the attached Internet Keyword Entry Point List $IKEPL_x$, such that each node in $IKEPL_x$ will point to an Internet Keyword whose phonetic spelling containing W_x ; and then the system combines $IKEPL_1, IKEPL_2, \dots, IKEPL_N$ to obtain a result $R = IKEPL_1 \cup IKEPL_2 \cup \dots IKEPL_N$; each Internet keyword in R having a phonetic spelling word containing at least one word W_x in W.

14.The method of claim 13, wherein after combination of the attached Internet keywords, the system further calculates the weight of each Internet keywords in R according to the specified rules, including weighing the count of the number of words within W that the Internet keyword contains, and weighing the total length of words within W that the Internet keyword contains; and then sorting the result list R according to weight of Internet keywords, so that the most approximate result appears at the head of the

list, followed by limited number of results in R to obtain a final result Internet keywords list R.

15.A method of intelligent information processing for full phonetic spelling words with southern accent misspellings comprising the steps of, after the entry of a query string of phonetic spelling words, analyzing the entered words against a table listing all possible misspelled consonants and vowels for corresponding Chinese characters by southerners; enumerating the misspelling words on the list; separating the query string into several words of phonetic spelling to cover all possible spelling words; carrying out the calculation of full phonetic spelling words search to obtain all possible Internet words of possible search results; analyzing the search results to obtain the final and most possible results.

16.The method of claim 15, wherein after the determination of the query in correct full phonetic spelling words, the system parses the query string against a Full Chinese Pinyin Words List (FCPWL) and splits the query string into one or more Chinese phonetic spelling words, that is $W=\{W_1, W_2, \dots, W_N\}$; and for each word W_x in W , the system will parse query input in the FCPWL to find the attached Internet Keyword Entry Point List $IKEPL_x$, such that each node in $IKEPL_x$ will point to an Internet Keyword whose phonetic spelling containing W_x ; and then the system combines $IKEPL_1, IKEPL_2, \dots, IKEPL_N$ to obtain a result $R = IKEPL_1 \cup IKEPL_2 \cup \dots \cup IKEPL_N$; each Internet keyword in R having a phonetic spelling word containing at least one word W_x in W .

17.The method of claim 16, wherein after combination of the attached Internet keywords, the system further calculates the weight of each Internet keywords in R according to the specified rules, including weighing the count of the number of words within W that the Internet keyword contains, and weighing the total length of words within W that the Internet keyword contains; and then sorting the result list R according to weight of Internet keywords, so that the most approximate result appears at the head of the

list, followed by limited number of results in R to obtain a final result
Internet keywords list R.

18. A system of intelligent information processing in the Internet comprising:

means for inputting a query string of words;

means for identifying whether an input of words is one of a URL address,
English words, native language characters, and native language
pronunciation notations;

means for querying the input in a corresponding server through the Internet,
and directly obtaining the query result therefrom if the input is a regular
URL;

means for parsing the input against at least one phonetic spelling word list
to find out corresponding Internet keyword, and then fetching a
corresponding query result if the input includes the native language
pronunciation notations; and

means for processing the input as a natural language input in a natural
language table, and obtaining a desired Internet keyword, and fetching a
corresponding query result of website URL if the input includes characters
of a native language.

19. The system of claim 18, further comprising means for checking whether the
Chinese phonetic spelling words of the query input contain frequent
misspellings due to the southern accent, and means for correcting the
misspelled words automatically, and wherein after the determination of the
query as correct phonetic spellings and correction of any misspelled words,
means for querying the database carries out the search of related URLs.